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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/654,768

09/04/2003

Peter J. Suttie

67,036-025; B05756-AT6

6696

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7590

03/22/2006

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EXAMINER

DESCHERE, ANDREW M

ART UNIT

PAPER NUMBER

2836

DATE MAILED: 03/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/654,768

Applicant(s)

SUTTIE, PETER J.

Examiner

Andrew M. Deschere

Art Unit

2836

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 9/4/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Double Patenting*

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim 1 rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,806,589. Although the conflicting claims are not identical, they are not patentably distinct from each other because the frequency adjuster of the prior patent would obviously require adjusting the speed of the APU in order to change its frequency.

Claim 9 rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-2 of U.S. Patent No. 6,806,589. Although the conflicting claims are not identical, they are not patentably distinct from each other because the frequency adjuster of the prior patent would obviously require adjusting the speed of the APU in order to

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change its frequency; additionally, there would obviously need to exist in the prior patent a communication bus communicatively linking the controller with the frequency adjuster.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 8-10, and 12 rejected under 35 U.S.C. 102(b) as being anticipated by United States Patent 6,278,262 ("Ulliyott"):

Ulliyott discloses an APU system. A controller controls the rotational speed of the APU to match the steady-state rotational speed of a primary generator. The controller then connects the APU to both the load and primary generator and subsequently removes the primary generator (Abstract). The controller causes the APU to gradually accelerate when matching the frequency of the electrical generator (column 4, lines 14-19). Electronic controller 26 is communicatively connected to breaker 22 for primary AC source 30 and APU controller 24 (Figure 1). The APU system may be used to provide back-up power to the electrical power system of an aircraft (column 1, lines 21-23).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 11, and 13 rejected under 35 U.S.C. 103(a) as being unpatentable over Ulliyott and United States Patent 6,365,982 ("Iles"). Ulliyott discloses an APU system with frequency and speed matching according to a primary generator, but does not teach the use of a look-up table that corresponds target APU speed with APU frequency. Iles teaches that a look-up table may be used with an engine. The look-up table matches a desired speed with a frequency. The speed to be set is linked to an engine operating state, such as idle (Abstract). It would have been obvious to one of ordinary skill in the art at the time of the invention to use a look-up table in the invention of Ulliyott if a discrete control scheme were desired.

Claim 4 rejected under 35 U.S.C. 103(a) as being unpatentable over Ulliyott and United States Patent 5,303,541 ("Goff"). Ulliyott discloses an APU system with frequency and speed matching according to a primary generator, but does not teach the use of a fuel schedule in operating the APU. Goff teaches an APU using a fuel schedule to maintain a proper fuel to air ratio, providing a proper operating speed of the APU (column 1, lines 41-61). It would have been obvious to one of ordinary skill in the art at the time of the invention to use a fuel schedule in the invention of Ulliyott to maintain the gradual acceleration when matching the frequency of the electrical generator.

Claims 5, 6 rejected under 35 U.S.C. 103(a) as being unpatentable over Ulliyott and United States Patent Application Publication 2003/0075982 ("Seefeldt"). Ulliyott discloses an APU system with frequency and speed matching according to a primary generator, but does not teach that a load device may be shut down during power transfer. Seefeldt teaches a transfer switch for a power transfer system that allows for an alternative power source in the event of

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failure of the main supply. Seefeldt also provides load shedding so that the maximum loading on the alternative power source is limited (Abstract; paragraphs 3-6). A combination of Ulliyott and Seefeldt would adjust the load on the system power supply based upon the connection of the APU or the primary generator, shedding loads as needed. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the APU system of Ulliyott with the load shedding of Seefeldt to prevent excessive loading on the APU.

Claim 7 rejected under 35 U.S.C. 103(a) as being unpatentable over Ulliyott, Iles, and Seefeldt. See rejection of claims 2 and 5 above.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

US Patents 4,874,961 (Henderson), 4,405,867 (Moakler et al.), and 4,492,874 (Near) teach systems for power transfer between sources that includes phase, frequency, and voltage synchronization.

US Patent 6,777,822 (of which the current Applicant is a common inventor) teaches the setting of a speed in an APU.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew M. Deschere whose telephone number is (571) 272-8391. The examiner can normally be reached on M-F 8:30-6:00, every other Friday off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on (571) 272-2800 x36. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AMD



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